NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offi-Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 04/29/2010

02/08/2007

Robin W Asher Clark Hill Suite 3500 500 Woodward Avenue Detroit, MI 48226-3435

10/579,436

EXAMINER AMAYA, CARLOS DAVID

PAPER NUMBER

7871

ART UNIT

2836

DATE MAILED: 04/29/2010

19339-105498

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. Tony Mekky

TITLE OF INVENTION: E-LATCH WITH MICROCONTROLLER ONBOARD LATCH AND INTEGRATED BACKUP SENSOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/29/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	correspondence includir d below or directed oth	for transmitting the I ng the Patent, advance nerwise in Block 1, b	SSUE FEE e orders and y (a) specify	I notification of r ying a new corres	naintenance fees w pondence address;	ill be and/or	nailed to the current (b) indicating a sepa	correspondence addre rate "FEE ADDRESS	ss as
CURRENT CORRESPONDE	ENCE ADDRESS (Note: Use Bi	tock 1 for any change of addr	:88)				can only be used fo cate cannot be used f such as an assignme ling or transmission.	domestic mailings of or any other accompan or formal drawing,	f the ying must
Robin W Asher Clark Hill Suite 3500		V2010		I he Stat addi tran	Cert reby certify that thi es Postal Service w ressed to the Mail smitted to the USPI	ificate s Fec(s ith suf Stop FO (57	of Mailing or Trans) Transmittal is being ficient postage for firs SSUE FEE address () 273-2885, on the d	nission deposited with the U: t class mail in an enve above, or being facsi te indicated below.	nited lope mile
500 Woodward A Detroit, MI 4822								(Depositor's n	ame)
Delloit, Wii 4022	.0-5455							(Signs	iture)
								0	Date)
APPLICATION NO.	FILING DATE		FIRST N	AMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO	
10/579,436	02/08/2007		Т	ony Mekky		1	9339-105498	7871	_
TITLE OF INVENTIONS								L	
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLIC	ATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE	_
nonprovisional	NO	\$1510		\$300	\$0		\$1810	07/29/2010	
EXAM	INER	ART UNIT	CLAS	SS-SUBCLASS	J				
AMAYA, CAR	LOS DAVID	2836	3	07-010100					
"Fee Address" indi PTO/SB/47; Rev 03-0; Number is required. 3. ASSIGNEE NAME AT	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT/ ess an assignee is ident in 37 CFR 3.11. Comp	inge of Correspondence "Indication form and Use of a Customa A TO BE PRINTED C	er (I) the or age (2) the regists 2 reg listed on THE PAT the data will NOT a subst	te names of up to ents OR, alternative name of a single tered attorney or a istered patent atto , no name will be TENT (print or typ I appear on the p itute for filing an	e firm (having as a agent) and the name meys or agents. If r printed.	memb s of up to nam	er a 2or to be is 3entified below, the de	cument has been filed	_
Please check the appropri	ate assignee category or	categories (will not b				•		up entity Governm	nent
Advance Order - #	o small entity discount p		A cl Pay:	neck is enclosed. ment by credit car Director is hereby	d. Form PTO-2038	is atta	equired fee(s), any de		m).
	SMALL ENTITY state	as. See 37 CFR I.27.					TTY status. See 37 Cl		
NOTE: The Issue Fee and interest as shown by the r	Publication Fee (if requeended of the United Sta	uired) will not be acce ites Patent and Traden	pted from an ark Office.	nyone other than t	he applicant; a regis	stered a	ttorney or agent; or th	e assignee or other par	ty in
Authorized Signature					Date				
Typed or printed name					Registration N				
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	CFR 1.311. The inform U.S.C. 122 and 37 C USPTO. Time will verden, should be sent to D NOT SEND FEES C	ation is requ FR 1.14. The ary depending the Chief I OR COMPLI	tired to obtain or r is collection is est ng upon the indiv nformation Office ETED FORMS TO	etain a benefit by the imated to take 12 n idual case. Any con- er, U.S. Patent and D THIS ADDRESS.	ne publ ninutes mment Fraden . SENI	to which is to file (and to complete, including s on the amount of tit ark Office, U.S. Depa of TO: Commissioner	by the USPTO to prog g gathering, preparing ne you require to com atment of Commerce, for Patents, P.O. Box 1	ess) and plete P.O. 450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



Detroit, MI 48226-3435

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/579,436	02/08/2007	Tony Mekky	19339-105498	7871	
75	90 04/29/2010		EXAMINER		
Robin W Asher			AMAYA, CARLOS DAVID		
Clark Hill			ART UNIT	PAPER NUMBER	
Suite 3500 500 Woodward Av		2836 DATE MAILED: 04/29/201	0		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 535 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 535 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/579,436 MEKKY ET AL. Notice of Allowability Examiner Art Unit CARLOS AMAYA 2836 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to Amendments filed on 3/2/2010. The allowed claim(s) is/are 1,3-8. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) \(\subseteq \text{Some* c} \) \(\subseteq \text{None of the:} \) 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material

/Albert W Paladini/

Primary Examiner, Art Unit 2836

9. ☐ Other

4/25/10

Art Unit: 2836

DETAILED ACTION

Drawings

The drawings received on 03/02/2010 are accepted.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance.

Claims 1, 10 are allowable over the prior art of record, because the prior art of record does not disclose "a battery charger electrically connected to the main electric power supply and said backup battery, said battery charger adapted for charging said backup battery; a capacitive element storing a charge for immediate discharge to said motor when said motor is disconnected from the main electric power supply; a diagnostics module electrically connected to said capacitive element, said diagnostics module monitoring a leakage current of said capacitive element; and a microcontroller electrically connected to said backup battery, said battery charger, and said diagnostics module, said microcontroller monitoring a voltage of said backup battery and controlling said battery charger in response to detecting a low voltage of said backup battery, said microcontroller monitoring the recharging of said backup battery to determine whether said backup battery is worn, said microcontroller receiving signals from said diagnostics module related to said leakage current to determine a failure of said capacitive element. and said microcontroller monitoring the discharge of said capacitive element when said motor is disconnected from the main electric power supply to determine the health of said capacitive element."

Application/Control Number: 10/579,436

Art Unit: 2836

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARLOS AMAYA whose telephone number is (571) 272-8941. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jared Fureman can be reached on (571) 272-2391. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/579,436 Page 4

Art Unit: 2836

Examiner, Art Unit 2836

/Albert W Paladini/ 4/25/10

Primary Examiner, Art Unit 2836